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CENTRAL INTELLIGENCE AGENCY,

INFORMATION REPORT

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(FOR KEY SEE REVERSE)

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Organization and Facilities of NII 88

1. NII 88 at Podlipki, 22 kilometers north of Moscow, is divided into two sections. One section is the institute building with its connecting workshops. The second section is the airfield with several workshops and a small experimental test stand for testing model combustion chambers. The specialists in the electronics laboratory explained the electrical components and apparatus of the V-2 to the Soviet workers. The remaining specialists, in part, assisted the Soviet translators in translating the reports which had been brought from Germany.
2. The specialists who worked at the airfield, on the other hand, had a clearly defined work program. Contrary to the practice at the institute building, the specialists could enter all the rooms and workshops at the airfield without special permission. The rooms and workshops had first to be equipped, and to limit access of the Germans to the various parts of the airfield would have hampered this setting-up process. The following work groups were located there:
 - a. Power plant development under the direction of Lt. Col. Umanskiy, whose German counterpart was Dr. Umpfenbach.
 - b. General missile development of the V-2 under the direction of Lt. Col. Korolov, whose German counterpart was Ing. Jaffke.
 - c. Electrical Equipment Design (Control Design) for the V-2.
 - d. Workshops under the direction Ing. Apel.

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STATE	x	ARMY	x	NAVY	x	AIR	x	FBI		AEC						
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3. In the vicinity of the institute building there was a large building with two large workshops. Near this building, there were a few workshops in which several complete V-2s were stored. The remaining workshops were fitted out with lathes, milling machines, and plate-working machines of all types and of the most modern design. There were also storerooms in which almost all construction parts and instruments needed for the completion of V-2s were stored. These parts had been taken from Germany. All workshops were connected by an extensive rail net with the main rail line.
 4. In 1945-46, a radar train (Funkmesszug) was built in Bleicherode and Klein Bodungen. It had been completely fitted out with all technical instruments and sleeping cars of the most modern design. It was designed to launch V-2s and to follow their flights by radar. The V-2s, ready to fire, were carried by the train on special flatcars. This special train stood on the tracks at the Podlipki plant. Several V-2s were also stored outside of the buildings. The entire plant was closely guarded, the radar train particularly so. No installations of any sort were set up inside the plant for carrying out experiments.
 5. It was rumored that the purpose of the entire plant at Podlipki was only to familiarize the Soviet technicians and engineers with rocket technique and to show the workers the processes and operations incidental to the work.
 6. The airfield was used as the plant's own landing field. The planes, five or six old types, were anchored out in the open. The buildings which were at the airfield were assigned to the various phases of V-2 development. All the necessary furnishings, which were comparatively primitive, were provided for these buildings after the German specialists arrived.
 7. The spraying laboratory, the electronics laboratory, the assembly workshop, the machine shop, the material storeroom, and the design and development sections belonged to Dr. Umpfenbach's group. This group had the task of remodeling the accessory section (Antriebsblock) of the V-2 so that a greater range could be obtained. Dr. Umpfenbach, therefore, decided to take up the problem of reintroducing hot gases (Gasentnahme) from the combustion chamber into the turbine, thus eliminating the T-section. This problem had been worked on before at Peenemuende. The decision of Dr. Umpfenbach to take up this problem again considerably increased the stay of the German specialists in the Soviet Union. Lt. Col. Korolov, on the other hand, wanted to fit the V-2 with a second T-section instead of using the reintroduction of the gases. This did not meet with Dr. Umpfenbach's approval, since he felt that the added instruments increased the complexity, hence the chance for more errors, and the weight. Furthermore, Dr. Umpfenbach felt that the increase in range, ca. 100 kilometers, did not justify the expenditure in manpower and material. Despite Dr. Umpfenbach's opposition, Lt. Col. Korolov with this German co-workers carried out his project. Jaffke, Wenzel, Jurschick, Schoeffmann, and Fr. Coermann were in this group. A second T-section was built onto the shortened accessory section, which had been produced by Dr. Umpfenbach's group. Several Soviet technicians were then given the job of producing design drawings of this working model. Lt. Col. Korolov wanted to launch such an improved V-2 in Kapustin. 50X1-HUM
- The problem of the reintroduction of the gases, on the other hand, was well received, and experiments were probably carried out in Kapustin. All developmental data, as well as the from Ostashkov, were sent to Kapustin. In Ostashkov a cooling apparatus for an experimental set-up, had been built, and had also been sent to Kapustin. These experimental devices centered around the gas problem. The reintroduction of the gases presented the problem of making the partly burned gas from the combustion chamber useful in driving the turbo-aggregate. The experimental set-up for examining this combustion chamber gas consisted of a seven-meter-long tube with various cooling and pressure release sections, and a four-step coil cooler by which the combustion chamber gas could be cooled and its pressure reduced to the point

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where it could be used to drive the turbo-aggregate. The gas, after cooling, was about 350°C. and 40 atms. All the specialists felt that our work at the airfield in Podlipki was primarily to produce the equipment and the basis for independent work by the Soviet technicians. It was only in Ostashkov that the German specialists were given work which had a definite purpose and planning behind it.

Area Layout

8. NII 88 is a collective concept. All the works belonging to NII 88 are embraced in this concept and are subordinate to the Ministry of Armaments. The center is Zavod 88 in Podlipki, to which the airfield also belongs. The sketch on page 5 gives an approximate view of the installations at Podlipki. Following are points shown in the sketch.

Point 1. Area of Zavod 88.

Point 1a. Administration building, called institute building.

Point 1b. Two-story brick building, which contained offices for Soviet designers.

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Point 2. Airfield area. For the approximate locations of the buildings at the airfield, see sketch on page 6. Following is a key to the sketch:

1. Guard house. One guard armed with a pistol was always stationed here.

2a. Spraying laboratory

2b. Electronics laboratory

2c. Assembly shop

2d. Machine shop

2e. Materiel storeroom

3a. Aircraft shed, empty

3b. Office of the power plant development group under Dr. Umpfenbach.

4a. Design section of Korolov's group.

4b. Assembly and experiment shop for general missile development section under Korolov.

5. Garages and test stand for flame jet experiments.

6. Design and development of the electric and high-frequency instruments used in the V-2.

7a. Storage space for V-2 combustion chambers and turbo-aggregates.

7b. Airfield surface.

Point 3. Road between Moscow and Zagorsk.

Point 4. Street through the center of Podlipki.

Point 5. Podlipki railroad station.

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Point 6. Electrified railroad (S-Bahn) between Moscow and Bolshevo.

Point 7, 8. Rail connections to the Podlipki works and the airfield.

Point 9. Street along the airfield and parallel to the main street.

Security Measures

9. A board fence surrounds the plant area. There are guards at the entrances and in and around the plant area itself. At the airfield, a board fence has been erected near the street, and a barbed-wire fence completes the remaining portion of the fence which surrounds the entire airfield. During working hours, the Germans were not allowed to leave the institute building.

Personnel

10. All personnel at NII 88 in Podlipki were sent there directly from Germany in October 1946, except where noted on the accompanying chart. [See page 7]. In February 1947, five specialists were sent from Gorodomlya to Podlipki. The first specialists to leave Podlipki were those who left for Gorodomlya in April-May 1947 (also indicated on the accompanying chart). The remaining specialists were sent to Gorodomlya in February, March, and April 1948, with the exception of Dr. Siemund who remained until July 1948. This chart indicates the extent of my knowledge of the organizational structure so far as Podlipki is concerned.

11. [redacted] Most of the Soviets were not particularly capable by German standards. Some exceptions were:

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Pobedonotsev, director of NII 88. Pobedonotsev was the inventor of the Stalin Organ (multi-tubed rocket launcher) and was a Stalin Prize winner. He was a professor, a good organizer, and understood the problems of the German specialists.

Korolov, group leader of general missile development. Probably a Dnl. Inc. he was very competent and capable of individual research. [redacted]

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Florov, capable assistant to Dr. Umpfenbach.

Umanskiy, power plant development group leader and leader at the airfield. His work was mostly of a supervisory nature. Later [redacted] he had been replaced. [redacted]

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12. The German specialists lived in houses which were assigned to NII 88 at Pushkino, Mamentovka, Glazma, Bolshevo, and Valentinovka. [redacted]

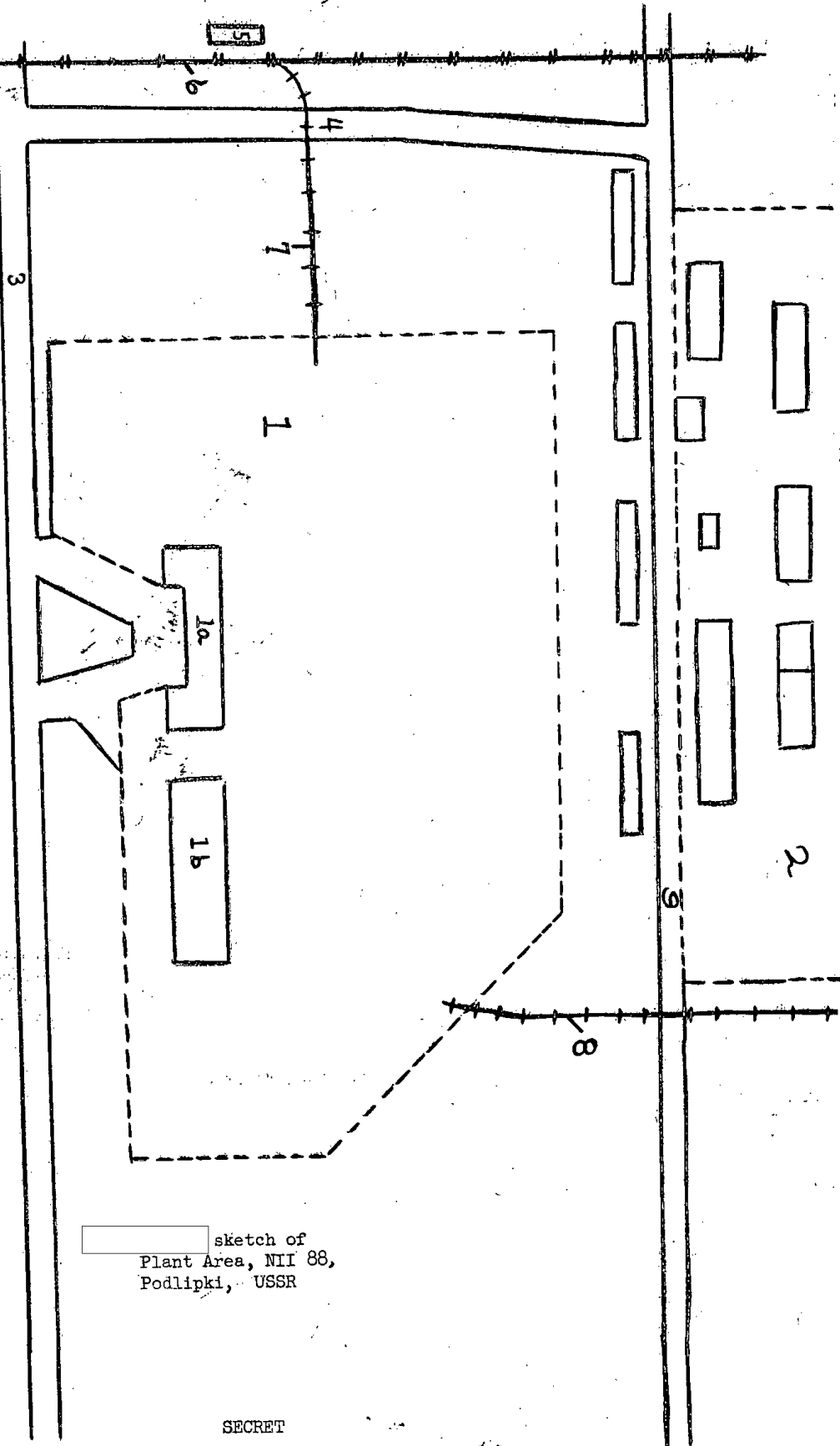
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sketch of
Plant Area, NII 88,
Podlipki, USSR

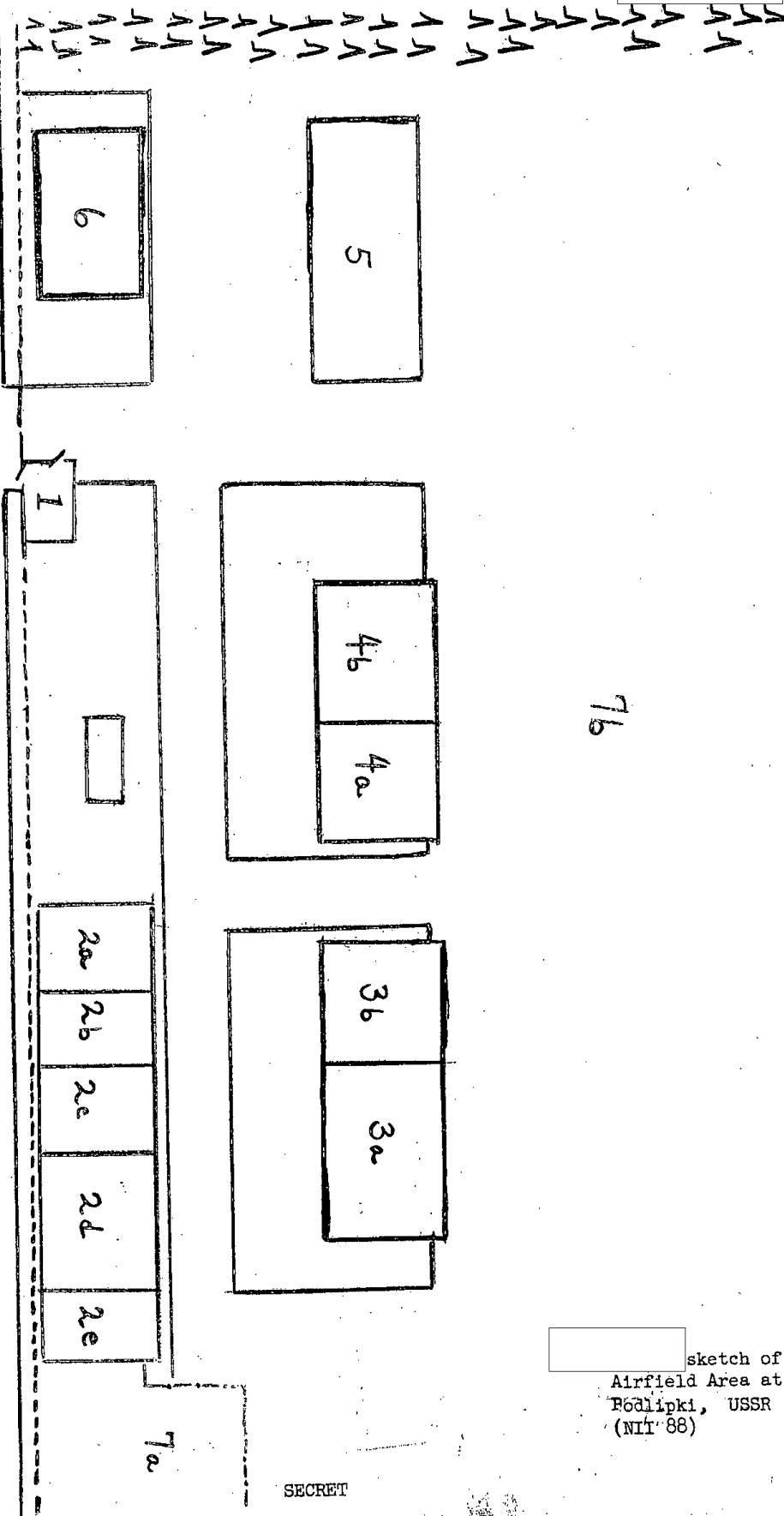
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sketch of
Airfield Area at
Podlipki, USSR
(NIT 88)

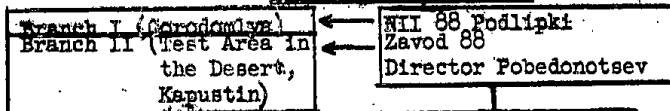
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Ministry of Armaments



Institute

Director Pobedonotsev
German Leader Dip. Ing. Groettrup *
Technician Aporius *
Ing. Arnhold *
Ing. Bachtik
Ing. Bethke
Ing. Buchner
Ing. Bujak
Ing. Busselt
Dipl. Ing. Elsner *
Ing. Falkenmeyer *
Ing. Fischer
Dipl. Ing. Fritsch
Ing. Fritsch
Ing. Gasch *
Dr. Hammer *
Ing. Hanske
Ing. Heinrich *
Dr. Hoch *
Ing. Jasper
Ing. Jaster
Krause
Ing. Alfred Lange *
Dr. Franz Lange
Gerhardt Lange
Frau Leumann *
Dr. Magnus
Frl. Mahrhold
Ing. Mende
Dr. Mollwo
Munke *
Ing. Anton Nerr *
Prof. Pauer *
Pohl
Ing. Freikschat
Dr. Quessel
Frau Quoss
Dipl. Ing. Range
Rebitzki
Ing. Bruno Schaefer
Ursula Schaefer
Dipl. Ing. Schieferdecker
Prof. Schmidt
Schneider *
Scholz *
Ing. Seifert
Steinbach
Ing. Tacke
Ing. Toepfer *
Ing. Torlinski
Ing. Weise
Ing. Zeidler
Ing. Zerczynski *
Ing. Ziener *
Zilinski

Airfield

Leader Lt. Col. Umanskiy
Leader Lt. Col. Korolov

Power Plant Development Group
Group Leader Lt. Col. Umanskiy
German Group Leader Dr. Umpfenbach
Florov, Ass't to Umpfenbach
Ing. Beyer
Ing. Becker
Dipl. Ing. Berthold
Dipl. Ing. Blasig
Ing. Brunner
Dr. Coermann, also worked under Korolov
Dr. Ferchland
Ing. Fieger
Joachim Fischer @
Ing. Harnisch
Ing. Iben
Dipl. Ing. Kretschmar
Ing. Mieth
Ing. Ferlik
Ing. Pointer
Ing. Seifensieder @
Technician Wendtlandt

Workshop
Group Leader Ing. Apel, Ass't. to Umpfenbach
Anders
Bahr
Fritz Bergemann
Fritzsche
Ing. Kaluza
Mechanic Kaminski
Kaepsch
Mueller
Pflanze
Rimpler
Schubert
Steffen
Ing. Wuttke

General Missile Development
Group Leader Korolov
German Group Leader Ing. Jaffke
Dr. Siemund (see note a)
Dr. Coermann
Ing. Juschik @
Dipl. Ing. Schoeffmann @
Dipl. Ing. Wenzel @

Control Design
Ing. Kreischer
Ing. Myrach

Organization Chart and Personnel at Podlipki, USSR, NII 88

All personnel sent directly to NII 88, Podlipki, in October 1946 except where noted.

* Personnel sent to Branch I (Gorodomya) in April-May 1947.

Bruno Schaefer arrived in 1948 from PW camp.

@ Personnel sent to Podlipki from Gorodomya in February 1947.

a. Dr. Siemund was not subordinate to Jaffke. He worked independently with Korolov.

He arrived in Podlipki in March 1947 on a voluntary basis and remained until July 1948.

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